REMARKS/ARGUMENTS

Applicants have received the Office action dated April 1, 2009, in which the Examiner: 1) rejected claims 1-9 and 10-18 under U.S.C. § 101 as being allegedly directed to non-statutory subject matter; 2) rejected claims 1, 4-7, 10 and 13-16 under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Pat. No. 6,988,139 ("*Jervis*") in view of U.S. Pat. No. 6,785,794 ("*Chase*"), and further in view of U.S. Pub. No. US2003/0149904 ("*Kim*"); 3) rejected claims 2, 3, 11 and 12 as being allegedly unpatentable over *Jervis*, *Chase* and *Kim* in view of U.S. Pat. No. 6,807,572 ("*Yu*"); and 4) rejected claims 8, 9, 17-18 as being allegedly unpatentable over *Jervis*, *Chase* and *Kim* in view of U.S. Pub. No. 2003/0013951 ("*Stefanescu*").

With this Response, Applicants have amended claims 1, 6-7, 9-10 and 15-16. Based on the amendments and arguments presented herein, Applicants respectfully request reconsideration and allowance of the pending claims.

I. § 101 REJECTIONS

The Examiner rejected claim 1-9 under 35 U.S.C. § 101 as being reasonably interpreted as software per se. Without conceding the merits of the Examiner's rejection and merely to expedite prosecution, Applicants have amended claim 1 to recite "a persistent storage." A persistent storage is not simply software. For at least this reason, Applicants respectfully request that the rejection of claim 1 and its dependent claims under § 101 be withdrawn.

The Examiner rejected claims 10-18 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claim 10 has been amended to show that the steps of the claimed method are performed "by a server." Support for the amendment can be found at least at Fig. 4 and line 21, page 13 – page 7, line 15 of the specification. The Court of Appeals for the Federal Circuit held that a method claim that is tied to a particular machine is statutory under § 101. *In re Bilski*, 545 F.3d 943, 961 (Fed. Cir. 2008). The Court of Customs and Patent Appeals, whose opinions are also binding on the Patent Office, held that a computer performed method was statutory. *Application of Bernhart*, 417 F.2d 1395, 1398-1401 (CCPA 1969). The *Bernhart* decision states that a computer,

programmed to perform a novel and nonobvious function is, in fact, a new machine, or at least an improvement to an old machine, and thus statutory. *Id.* at 1400. Accordingly, under the binding precedent of *Bernhart*, a server that performs a novel and nonobvious method is a particular machine for purposes of the § 101 analysis under *In re Bilski*. Therefore, amended claim 10 and its dependent claims are directed to statutory subject matter. Applicants thus respectfully request that the § 101 rejection of claims 10-18 be withdrawn.

II. § 103 REJECTIONS

Amended claim 1, in part, requires "a power manager coupled to the storage access subsystems, the power manager selectively changes the power state of each storage access subsystem based on a power management rank assigned to each storage access subsystem" and "a transaction analyzer that determines a priority metric for an incoming access transaction to the persistent storage and that transfers the incoming access transaction to one of the storage access subsystems by matching the priority metric to the power management ranks."

The Examiner recognizes that *Jervis* does not teach Applicants' claimed "storage access subsystems" and relies on *Chase* to support the obviousness rejection. See Office Action dated 04/01/09, page 4, item 6. However, the embodiments in *Chase* only describe a single NAS controller 110 (Fig. 1A) or a single RAID controller 160 (Fig. 1B) for accessing storage. The physical resources 180 and disks 170 described in *Chase* represent the physical components (disk arms, disk heads, platters, laser heads, etc.) of storage devices rather than a set of storage access subsystems to access a persistent storage. See Fig. 1B and col. 5, lines 44-50. Thus, even if *Chase* were to be combined with *Jervis*, the combination would not result in an information system having a set of storage access subsystems to access a persistent storage as in claim 1. Instead, the combination would use a single controller to access one or more storage mediums (see Figs. 1A and 1B). The obviousness rejection of claim 1 is thus deficient.

Further, Applicants respectfully submit that the combination of *Jervis* and *Chase* is based on impermissible hindsight reconstruction in which only the Applicants' disclosure – not the cited references – provides the blueprint to make the suggested combination. The Examiner has not convincingly shown that *Jervis'* technique is compatible with or benefits from *Chase's* selection of physical resources. For example, the Examiner provides no explanation as to why modification of *Jervis'* technique to employ *Chase's* selection of physical resources would be obvious except for a vague motivation "to extend the breadth of Jervis' invention to persistent stores in an information system." See Final Office Action dated 04/01/09, page 4, item 7. Thus, the only apparent motivation to combine *Jervis* and *Chase* ("to extend the breadth of Jervis' invention to persistent stores") is based on hindsight reconstruction using Applicants' disclosure rather than any teachings in the cited art.

Further, the proposed combination of *Jervis* and *Chase* also would not teach "a power manager coupled to the storage access subsystems, the power manager selectively changes the power state of each storage access subsystem based on a power management rank assigned to each storage access subsystem" as in claim 1. The Examiner recognizes that *Jervis* and *Chase* are deficient in this regard and relies on *Kim* to support the obviousness rejection. See Office Action dated 04/01/09, page 4, item 8. However, *Kim* also lacks a set of storage access subsystems and does not teach power management for storage access subsystems as in claim 1. Instead, *Kim* describes automated or user-selected prioritization of power for a device having a phone module, a PDA module, and a digital camera module. Thus, even if *Kim* were to be combined with *Jervis* and *Chase*, the proposed combination would teach power management of phone, PDA, and digital camera modules rather than power/transaction management of "storage access subsystems" for accessing "a persistent storage" as in claim 1.

Further claim 1, in part, requires "a transaction analyzer that determines a priority metric for an incoming access transaction to the persistent storage and that transfers the incoming access transaction to one of the storage access

subsystems by matching the priority metric to the power management ranks." The Examiner describes Jervis as teaching a "transaction analyzer," but has not properly addressed the above limitation. See Office Action dated 04/01/09, page 4, item 5. The transaction analyzer in *Jervis* does not transfer transactions to storage access subsystems by matching priority metrics of a transaction with a power management rank for each storage access subsystem as in claim 1. None of the cited references or combinations thereof teaches or suggests these limitations. As previously noted, none of the cited references are even directed to a set of storage access subsystems. Thus, the Examiner's proposed combination lacks at least one limitation from claim 1. Likewise, the cited references or combinations thereof do not teach or suggest power management ranks for each such storage access subsystem and matching prioritized transactions to storage access subsystems based on the power management ranks as in claim 1. Even if the Examiner were to interpret Applicants' "set of storage access subsystems" as being comparable to *Chase's* physical resources (Applicants submit that such comparison is unreasonable), combining/modifying the references to teach Applicants' claimed limitations would improperly change *Chase's* principle of operation to assign requests to the physical resources based on service level agreements (SLAs) and loads (see col. 5, lines 51-59) with Applicants' claimed matching of transaction priorities with power management ranks of storage access subsystems. See MPEP § 2143.01, Section VI. For at least these reasons, claim 1 and its dependent claims are allowable over *Jervis*, *Chase* and *Kim*.

Claim 10, in part, requires "selecting, by the server, which of a set of storage access subsystems is to be used when performing the incoming access transaction by matching the priority metric to a power management rank for each storage access subsystem." For much the same reasons as given for claim 1, *Jervis*, *Chase* and *Kim* do not teach or suggest the above limitations. For at least these reasons, claim 10 and its dependent claims are allowable over *Jervis*, *Chase* and *Kim*.

Claims 4-7 depend from claim 1 and are allowable for the same reasons. With regard to claims 4-7, the Examiner recognizes that *Jervis*, *Chase* and *Kim* fail to teach the respective limitations and provides no objective evidence to support the obviousness rejection. Instead, the Examiner makes various conclusory statements regarding what those of skill in the art would consider obvious. See Office Action dated 04/01/09, pages 5-6, items 10-15. The Examiner does not even allege that the limitations of claims 4-7 are known in the art. Applicants submit that limitations of claims 4-7 are not common knowledge capable of instant and unquestionable demonstration as to defy dispute and thus the Examiner must cite documentary evidence to support the conclusion that the limitations are known. See MPEP § 2144.03, section A. Even assuming, *arguendo*, that the limitations of claims 4-7 are known, merely concluding that the limitations are within the capabilities of one of ordinary skill in the art would not be sufficient by itself to establish prima facie obviousness. See MPEP § 2143.01, section IV. Again, the Examiner has not even established that the limitations of claims 4-7 are known. For at least these additional reasons, claims 4-7 are allowable over *Jervis*, *Chase* and *Kim*.

III. CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are

hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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